## The Chief Joseph Hatchery Program – Principles<sup>1</sup>

The Colville Tribes assert that hatchery production is an indispensable part of a multifaceted strategy to improve destabilized fish abundance and diminished system-wide survival. Unsustainable harvest regimes, migratory impediments, habitat degradation and other environmental factors have contributed to historic declines that require substantive action.

Put simply, we cannot replace lost habitat or overcome multiple human-caused limitations to sustainability, or maintain viable natural fish populations, unless hatchery programs are part of the overall approach. Therefore, individual program components must be viewed as tools that can be managed as a comprehensive policy to meet conservation and resource goals.

The actions being implemented by the Colville Tribes' Fish and Wildlife Department represent an extraordinary effort to recover Okanogan and Columbia River natural salmon and steelhead populations. The Tribes have embraced hatchery reform efforts that seek to find a balance between artificial and natural production and address the often conflicting goals of increased harvest and conservation.

Hence, the purpose of this document is to confirm that sound principles, and an adaptive management framework, are incorporated into the Chief Joseph Hatchery Program. This insures that production plans and activities are guided by science-based standards and that rigorous monitoring and evaluation designs are applied. These principles are:

- 1. Manage hatchery broodstock to achieve proper genetic integration with, or segregation from, natural populations;
- 2. Promote local adaptation of natural and hatchery populations;
- 3. Minimize adverse ecological interactions between hatchery- and natural-origin fish;
- 4. Minimize effects of hatchery facilities on the ecosystem;
- 5. Maximize survival of hatchery fish in integrated and segregated programs;
- 6. Develop clear, specific, quantifiable harvest and conservation goals for natural and hatchery populations within an "All H" (Hatcheries, Habitat, Harvest, Hydro) context;
- 7. Design and operate hatchery programs in a scientifically defensible manner;
- 8. Monitor, evaluate and adaptively manage hatchery programs;
- 9. Institutionalize and apply a common implementation framework;
- 10. Use the framework to set priorities, guide project review, and determine return on investments;
- 11. Provide training for all program staff;
- 12. Host the Chief Joseph Annual Program Review as part of the adaptive management principle, and
- 13. Develop and maintain a state-of-the-art CJHP database and a highly functional web-presence.

<sup>&</sup>lt;sup>1</sup> Adapted from the Hatchery Reform Act, the CJHP 2012 Implementation Plan and other key program documents developed under the CJHP Master Plan (4-Step Process), Hatchery Science Review Group reports and independent science review.